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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,271	02/06/2002	Gabriel Daemon Engel		7734

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EXAMINER	
VAUGHN, GREGORY J	

ART UNIT	PAPER NUMBER
2178	

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/049,271	ENGEL ET AL.	
	Examiner	Art Unit	
	Gregory J. Vaughn	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10 and 13-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 13-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Application Background

1. This action is responsive to the applicant's response filed on 6/8/2006.

2. No claims were amended with this response.

3. Claims 1-10 and 13-22 are pending in the case, claims 1, 13 and 18 are independent claims. Claims 11 and 12 were previously canceled.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> *(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

5. Claims 1, 2, 4-7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshikawa, US Patent 6,327,592, filed 7/2/1998, patented 12/4/2001 in view of Sadovnik et al., US Patent 5,764,317, filed 6/26/1995, patented 6/9/1998.

6. **Regarding independent claim 1**, Yoshikawa discloses displaying data in a software program on a multi-layer display in Figure 7 at reference sign 601 (layers shown in the data tables designated at reference signs 606, 607 and 608). Yoshikawa discloses assigning a particular screen designation code to a first group of data in Figure 7 at reference sign 606 (shown as "*Sales Volume*"). Yoshikawa discloses assigning a particular screen designation code to a second group of data in Figure 7 at reference sign 607 (shown as "*Number of Employees*"). Yoshikawa discloses the screen designation code determining on which screen in the multi-layer display the group of data is displayed in Figure 7 (the data is shown displayed on the only system screen shown in the figure). Yoshikawa fails to disclose the multi-layer display as having at least two screens. Sadovnik teaches the use of two or more screens in a multi-layer display. Sadovnik recites: "*another object of the invention is to provide a volumetric multi-layer screen that has one or more of the characteristics discussed above but which is relatively simple to manufacture and assemble*" (column 4, lines 28-31). See also Sadovnik's Figure 4A in which the multi-layer display is shown with 4 screens.

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time the invention was made, to combine the multi-layer display of data as taught by Yoshikawa with the plurality of screens of a multi-layer display as taught by Sadovnik, in order to provide the ability to display several layers of related data concurrently and transparently.

7. **Regarding dependent claim 2**, Yoshikawa discloses a spreadsheet in Figure 7 at reference sign 606, 607 and 608.

8. **Regarding dependent claim 4**, Yoshikawa discloses one of the groups of adapt is a formula corresponding to values in the cells in another group of data in Figure 7 at reference sign 608 (shown as "*Sales Volume / Number of Employees*").

9. **Regarding dependent claim 5**, Yoshikawa discloses the second group of data is a wrap around in Figure 18 at reference sign 408 and 410 (shown as scroll bars for the vertical and horizontal axis of the display).

10. **Regarding dependent claim 6**, Yoshikawa discloses the second group of data containing highlights in Figure 14 at reference sign 809.

11. **Regarding dependent claim 7**, Yoshikawa discloses the second group of data with hyperlinks from one part of the display to another in Figure 21 at reference sign 703 (shown as the dashed lines connecting the first group of data to second group of data).

12. **Regarding dependent claim 9**, Yoshikawa discloses the second group of data has the ability to scroll through information on a particular screen in Figure 18 at reference sign 408 and 410 (shown as scroll bars for the vertical and horizontal axis of the display).

13. **Regarding dependent claim 10**, Yoshikawa discloses the second group of data contains useful information pertaining to the first groups of data in Figure 7 at reference sign 608.

14. Claims 13-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGarry US Patent 6,859,907, filed 8/9/1999, patented 2/22/2005 in view of Sadovnik.

15. **Regarding independent claim 13**, McGarry discloses a multi-layer display with front and back displays. McGarry recites: "*The screen of the monitor 11 depicts a semitransparent spreadsheet 16 superimposed on an image and graphics layer 17 to form a composite display of the invention*" (column 3, lines 8-10). McGarry discloses in Figure 2 the display of a first group of data and a front display designation at reference sign 21; a second group of data and a back display designation at reference sign 22. McGarry fails to disclose the multi-layer display as having at least two screens. Sadovnik teaches the use of two or more screens in a multi-layer display. Sadovnik recites: "*another object of the invention is to provide a volumetric multi-layer screen that has one or more of the characteristics discussed above but which is relatively simple to manufacture and assemble*" (column 4, lines 28-31). See also Sadovnik's Figure 4A in which the multi-layer display is shown with 4 screens.

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time the invention was made, to combine the multi-layer display of data as

taught by McGarry with the plurality of screens of a multi-layer display as taught by Sadovnik, in order to provide the ability to display several layers of related data concurrently and transparently.

16. **Regarding dependent claim 14**, McGarry discloses the data generated within a spreadsheet program. McGarry recites: "*The invention provides methods for adapting electronic spreadsheets to applications in the field of industrial machine vision*" (column 1, lines 60-62).

17. **Regarding dependent claim 15**, McGarry discloses different data elements assigned to a single cell of a spreadsheet. McGarry recites: "*each cell representing a single value that is, in turn, a function of some number of other cells in the grid*" (column 1, lines 33-34).

18. **Regarding dependent claim 16**, McGarry discloses in Figure 4 a first group of data comprising a number (shown at reference sign 43) and a second group of data comprises a formula (shown at reference sign 42).

19. **Regarding dependent claim 17**, McGarry discloses apportion of the data is displayed on the back screen is viewable through the front screen in Figure 2 at reference sign 23.

20. **Regarding claims 18-22**, the claims are directed to a method for the method of claims 13-17, and are rejected using the same rationale.

21. Claim 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshikawa in view of Sadovnik, in further view of Courter et al. Microsoft Office 2000 Professional Edition, 1999 (hereinafter Courter).

22. **Regarding dependent claims 3 and 8**, Yoshikawa and Sadovnik disclose visual effects in the manipulation of data, with screen designations of groups of data and simultaneous data display on a multi-layer display as described above. Yoshikawa and Sadovnik fail to disclose the use of tabs corresponding to the groups of data (claim 3) or the use of error messages. Courter teaches the use of tabs for groups of data. Courter discloses in Figure 22.1 on page 543 a spreadsheet using tabs to group the data (shown as "*Sheet tabs*"). Courter teaches the use of error messages on page 685 in table 27.1 titled "*Error Codes*"

Therefore, it would have been obvious, to one of ordinary skill in the art at the time the invention was made, to use tabs, as taught by Courter, to manage Yoshikawa and Sadovnik's groups of data in order to "*enter and format spreadsheets, create formulas, design charts, and manage and analyze data*" (Courter, page xxxi, fourth paragraph).

Response to Arguments

23. Applicant's arguments filed 6/8/2006 have been fully considered but they are not persuasive.

24. **Regarding independent claim 1**, applicant states: "*There is virtually no disclosure, teaching or suggestion of a "multi-layer display of data" or a "screen designation code" in Yoshikawa*" (page 2, last paragraph of the response filed 6/8/2006). Applicant is directed to the rejection of claim 1, as restated above. Yoshikawa discloses in Figure 7, a first and second group of data (shown as the "*Sales Volume*" table at reference sign 606 and the "*Number of Employees*" table at reference sign 607). Yoshikawa discloses the designation codes for the tables as the table names, and are used for designating a screen at reference signs 601, 602 and 603 (shown as the command "*Make New Table*" for "*Volume/Employees*" which is equivalent to "*Sales Volume*" divided by "*Number of Employees*"), which is shown on the current screen. Sadovnik teaches taking the single screen of data information (as discloses by Yoshikawa) and spreading it out over a plurality of screens (as described above).

25. **Also regarding independent claim 1**, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Yoshikawa and Sadovnik are directed toward the display of

discrete data sets for enhanced usability – Yoshikawa for a calculator that displays the calculation of a data structure, and Sadovnik for displaying a volume visualization of data. One of ordinary skill in the art, at the time the invention was made, would have been motivated to combine the references in order to provide the ability to display several layers of related data concurrently and transparently.

26. **Regarding independent claims 13 and 18**, applicant states: "*McGarry does not describe "a multi-layer display having front and back screens" or "a multilayer screen have front and back screens*" (page 4, fifth paragraph of the response filed 6/8/2006). Applicant is directed to the rejection of claims 13 and 18, as restated above. McGarry is relied upon to disclose the data groups being displayed "in front of" or "behind" the other groups of data, thereby establishing the "front" and "back" status of one group of data in relation to the other. Sadovnik teaches taking the single screen of data information (as discloses by McGarry) and spreading it out over a plurality of screens (as described above).

27. **Also regarding independent claims 13 and 18**, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5

USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, McGarry and Sadovnik are directed toward the display of discrete data sets for enhanced usability – McGarry for displaying an object superimpose with related data, and Sadovnik for displaying a volume visualization of data. One of ordinary skill in the art, at the time the invention was made, would have been motivated to combine the references in order to provide the ability to display several layers of related data concurrently and transparently.

Conclusion

28. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Vaughn whose telephone number is (571) 272-4131. The examiner can normally be reached Monday to Friday from 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen S. Hong can be reached at (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

STEPHEN HONG
SUPERVISORY PATENT EXAMINER

Gregory J. Vaughn
Patent Examiner
August 14, 2006